
SPECIAL SCHEDULES

ISSUED BY THE CENSUS OFFICE FOR THE COLLECTION OF STATISTICS RELATING TO MINERAL INDUSTRIES
IN THE UNITED STATES AT THE ELEVENTH CENSUS.

LIST OF SPECIAL SCHEDULES.

No. 1. For minor minerals.	No. 12a. Coal distribution.
No. 2. Iron ore mines.	No. 13. Quicksilver mines and reduction works.
No. 3a. Gold and silver mines and reduction works.	No. 14. Crude petroleum.
No. 4. Copper mines.	No. 15. Natural gas.
No. 5. Lead mines.	No. 16. Stone quarries.
No. 6. Zinc mines.	No. 17. Mineral waters.
No. 9. Manganese ore mines.	No. 19. Lead smelters and refiners.
No. 11. Precious stones.	No. 20. Lead refiners.
No. 12. Coal mines.	No. 21. Zinc reduction works.

SPECIAL SCHEDULES.

[TITLE PAGE PRECEDING EACH SPECIAL SCHEDULE.]

ELEVENTH CENSUS OF THE UNITED STATES. STATISTICS OF MINES AND MINING.

DEPARTMENT OF THE INTERIOR,
CENSUS OFFICE,
WASHINGTON, D. C., January 1, 1890.

Dr. David T. Day, of the United States geological survey, has been appointed, in compliance with law, as the special agent of the Census Office in charge of the statistics relating to mines and mining.

The special agent thus appointed has all the authority of a census enumerator under the act of March 1, 1889, and is empowered to conduct in his own name all the correspondence relating to this branch of the work.

Mine operators and owners of works are hereby assured that their answers to the questions within will be held strictly confidential, and will not be disclosed to any unauthorized person whomsoever.

Special agents and enumerators are sworn officers of the government, and severe penalties are imposed by law for a violation of their obligations.

The data will not be used by this office as the basis of any system of taxation or license, or in any way to adversely affect the interest of miners or operators of mines or works. No publication will be made in the census reports which will disclose the names or operations of individuals.

Very respectfully,

ROBERT P. PORTER,
Superintendent of Census.

Approved:

JOHN W. NOBLE,
Secretary of the Interior.

[Extract from "An act to provide for taking the Eleventh and subsequent censuses".]

SEC. 15. And every president, treasurer, secretary, agent, director, or other officer of every corporation from which answers to any of the schedules provided for by this act are herein required, who shall, if thereto requested by the superintendent, supervisor, or enumerator, willfully neglect or refuse to give true and complete answers to any inquiries authorized by this act, or shall willfully give false information, shall be guilty of a misdemeanor, and on conviction thereof shall be fined not exceeding ten thousand dollars, to which may be added imprisonment for a period not exceeding one year.

CERTIFICATE.

This is to certify that the information contained in this schedule is complete and correct to the best of my knowledge and belief.

[Signature.]

[Official designation.]

SPECIAL SCHEDULE No. 1.—FOR MINOR MINERALS.

LOCATION.

1. Name of mine or works
2. Location of mine:
Mining district or region
- County
- State
3. Name and post-office address of company, corporation, or individual operating the mine or works
4. Name and post-office address of resident superintendent or agent
5. Name of substance produced

PRODUCT.

NOTE.—Use the long or short ton or other unit, according to your usual custom, but state definitely the number of pounds in the unit used. If any calculations are made, such as determining the total value of the product, it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.

6. Product for the year ended December 31, 1889:
Total amount of crude material taken from the mine
- Total amount of the substance in the condition in which it was first sold
7. Stock on hand, including that at mine or mill, in transit, and unsold in the hands of agents:
(a) January 1, 1889
- (b) January 1, 1890
8. Total value of the year's product

NOTE.—The value is to be taken at the stage in the preparation of the mineral at which it first becomes a marketable article and has a definite market price. For example: The price of mica is that at which it was first sold, whether in

SPECIAL SCHEDULE No. 1.—FOR MINOR MINERALS—Continued.

blocks, or rough, or cut sheets. If it is shipped to a distance before selling, the freight charges from the mine to the selling point should be given.

LABOR AND WAGES.

CLASSIFICATION.	Average number employed. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
9. Labor:			
Above ground (not including office force):			
Foremen or overseers.....			
Mechanics			
Laborers (c)			
Boys under 16			
Below ground (not including office force):			
Foremen or overseers.....			
Miners.....			
Laborers (c)			
Boys under 16			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

SPECIAL SCHEDULE No. 1.—FOR MINOR MINERALS—Continued.

10. Wages:

Total amount of wages paid during 1889 \$.....
 Total amount paid to contractors for contract work done in 1889, not
 included in the above item, deducting supplies charged to them. \$.....

	Number.	Total wages paid in 1889.
11. Office force at mines or works: (d)		
Males		\$.....
Females		\$.....
Total		\$.....

d Where two or more mines with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employés of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the mines with whose administration such persons are connected.

12. Number of days during the year when the mines or works were idle, and the cause

CAPITAL.

13. Total value of mine and improvements as at present developed \$.....
 Distributed as follows:
 In land..... \$.....
 In buildings and fixtures..... \$.....
 In tools, implements, livestock, machinery, and supplies on
 hand..... \$.....
 In cash (not reported in the foregoing items)..... \$.....

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

14. Power used in mining:

 Number and total horse power of steam boilers.. No....; horse power.....
 Number and size of cylinders of steam engines.....
 If other power, state kind.....
 Number of motors.....; horse power.....

15. Number of animals employed.....
 16. Total value of supplies and materials of all kinds consumed during
 the year 1889..... \$.....
 17. Total of all other expenditures for the mines or works (including
 amounts paid for rent, taxes, insurance, interest, etc.)..... \$.....

NOTE.—Remarks concerning uses for which your product has proved especially valuable, analyses, peculiar mining features, etc., will be gladly received, and should be noted on the blank pages.

SPECIAL SCHEDULE No. 2.—IRON ORE MINES.

LOCATION.

1. Name or designation of mine

2. Location of mine:
 Mining district, range, or region.....
 County.....
 State.....

3. Name and post-office address of company, corporation, or individual operating
 the mine or works

4. Name and post-office address of resident superintendent or agent.....

5. Character of ore produced:
 Brown hematite, limonite, or bog ore.....
 Red hematite, specular, or fossil ore.....
 Magnetic ore.....
 Carbonate, siderite, spathic, or black-band ore

PRODUCT.

NOTE.—Use the long or short ton, according to your usual custom, but state definitely the number of pounds in the ton used. If any calculations are made, such as determining the total value of the product from the price per ton, it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.

SPECIAL SCHEDULE No. 2.—IRON ORE MINES—Continued.

6. Total amount of marketable iron ore produced in the year ended December 31,
 1889, including the amount smelted at the mine

7. Total stock of ore on hand, including that at mine or furnace, in transit and
 unsold in hands of agents:
 January 1, 1889.....
 January 1, 1890.....

8. Total value of iron ore produced in 1889 at the prices received for ore
 delivered on cars or carts at the mine \$.....

9. Principal markets and proportion of product sent to each market to
 which your ore is supplied

LABOR AND WAGES.

CLASSIFICATION.	Average number em- ployed. (a)	Average wages per day. (b)	Average num- ber of days work made by each class dur- ing the year.
10. Labor:			
Above ground (not including office force):			
Foremen or overseers.....			
Mechanics.....			
Laborers (c).....			
Boys under 16.....			
Below ground (not including office force):			
Foremen or overseers.....			
Miners.....			
Laborers (c).....			
Boys under 16.....			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

11. Wages:

 Total amount of wages paid to above during 1889..... \$.....
 Total amount paid to contractors for contract work done in 1889, not
 included in the above item, deducting supplies charged to them.. \$.....

12. Office force at mines or works: (d)

 Males.....No.... \$.....
 Females.....No.... \$.....

 Grand total of wages..... \$.....

d Where two or more mines with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employés of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the mines with whose administration such persons are connected.

13. Number of days during the year when the mines or works were idle, and the cause

CAPITAL.

14. Total value of mine and improvements as at present developed..... \$.....
 Distributed as follows:
 In land..... \$.....
 In buildings and fixtures..... \$.....
 In tools, implements, live stock, machinery, and supplies on
 hand..... \$.....
 In cash (not reported in the foregoing items)..... \$.....

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

15. Power used in mining:

 Number and total horse power of steam boilers... No....; horse power.....
 Number and size of cylinders of steam engines.....
 If other power, state kind.....
 Number of motors.....; horse power.....

16. Number of animals employed.....

SPECIAL SCHEDULE No. 2.—IRON ORE MINES.—Continued.

17. Total value of supplies and materials of all kinds consumed during the year 1889..... \$.....
18. Total of all other expenditures for the mines or works (including amounts paid for rent, taxes, insurance, interest, etc.)..... \$.....
- NOTE.—Remarks showing the uses for which your product has proved especially valuable, analyses, etc., will be gladly received, and should be made upon the blank pages of this schedule.

SPECIAL SCHEDULE No. 3a.—GOLD AND SILVER MINES AND REDUCTION WORKS.

LOCATION.

1. Name of mine or works.....
2. Location of mine or works:
Mining district or region.....
County.....
State.....
3. Name and post-office address of company, corporation, or individual operating the mine or works.....
4. Name and post-office address of resident superintendent or agent.....

PRODUCT.

NOTE.—Use the long or short ton or other unit, according to your usual custom, but state definitely the number of pounds in the unit used. If any calculations are made, such as determining the total value of the product, etc., it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.

5. Total amount of ore produced in the year ended December 31, 1889 (tons of pounds).....
6. Total amount of ore sold or treated in 1889 (tons of pounds).....
7. Total assay value of ore sold or treated in 1889:
Gold..... \$.....
Silver..... \$.....

NOTE.—Use coining value for silver, 1 ounce=\$1.2929.

8. Where and by what process was the ore treated?.....
9. Bullion produced from ore treated in 1889:.....

METALS.	Quantity.	Value.
	<i>Ounces fine.</i>	
Gold.....		\$.....
Silver (value of ounce \$1.2929).....		\$.....
	<i>Pounds.</i>	
Copper.....		\$.....
Lead.....		\$.....
Other metals (designate them).....		\$.....
Total.....		\$.....

LABOR AND WAGES.

CLASSIFICATION.	Average number employed. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
10. Labor:			
Above ground (not including office force):			
Foremen or overseers.....			
Mechanics.....			
Laborers (c).....			
Boys under 16.....			
Below ground (not including office force):			
Foremen or overseers.....			
Miners.....			
Laborers (c).....			
Boys under 16.....			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

11. Number of days during the year when the mines or works were idle, and the cause.....

SPECIAL SCHEDULE No. 3b.—GOLD AND SILVER MINES AND REDUCTION WORKS.—Continued.

EXPENDITURES.

12. Wages:
Total amount of wages paid during 1889..... \$.....
Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them..... \$.....
13. Office force at mines or works: (d)
Males..... No..... \$.....
Females..... No..... \$.....
Grand total of wages..... \$.....
- d Where two or more mines with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employees of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the mines with whose administration such persons are connected.
14. Total value of supplies and materials of all kinds consumed during the year 1889..... \$.....
15. Total of all other expenditures for the mines or works (including amounts paid for rent, taxes, insurance, interest, etc.)..... \$.....
16. Grand total of expenditures..... \$.....

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

VALUE OF MINING PROPERTY.

17. Total present actual cash value of the mine and mining plant..... \$.....
Distributed as follows:
Present actual cash value of buildings at mine..... \$.....
Present actual cash value of railroads on surface..... \$.....
Present actual cash value of machinery of all kinds above and below ground, including pumps, engines, boilers, cars, tools, etc..... \$.....
Present actual cash value of underground improvements, including shafts, tunnels, drifts, tramways, etc..... \$.....
Present actual cash value of mine supplies of all kinds on hand December 31, 1889..... \$.....
Present actual cash value of the mine itself exclusive of above items..... \$.....
Cash not reported in the foregoing items..... \$.....
18. Value of mill, smelting, or other reduction works (exclusive of mining property):
State character of works, whether concentrating, amalgamating, chlorinating, smelting, or other works.....
Present actual cash value of buildings..... \$.....
Present actual cash value of machinery and plant of all kinds, except buildings..... \$.....
Present actual cash value of supplies on hand December 31, 1889..... \$.....
Total cash value of works..... \$.....
19. Power used in mining:
Number and total horse power of steam boilers.....; No.....; horse power.....
Number and size of cylinders of steam engines.....
If other power, state kind.....
Number of motors.....; horse power.....
20. Number of animals employed.....

SPECIAL SCHEDULE No. 4.—COPPER MINES.

LOCATION.

1. Name of mine or works.....
2. Location of mine:
Mining district or region.....
County.....
State.....
3. Name and post-office address of company, corporation, or individual operating the mine or works.....
4. Name and post-office address of resident superintendent or agent.....

PRODUCT.

NOTE.—Use the long or short ton or other unit, according to your usual custom, but state definitely the number of pounds in the unit used. If any calculations are made, such as determining the total value of the product, it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.

SPECIAL SCHEDULE NO. 4.—COPPER MINES—Continued.

5. Total amount of ore produced in the year ended December 31, 1889
 Total amount of concentrates, if concentrating is used.....
 Total amount of matte produced.....
 Total amount of blister or black copper produced.....
 Copper contents of product as sold, whether ore, concentrates, matte, or blister.....
6. Total stock of ore on hand, including that at mine, mill, or smelter, in transit, and unsold in hands of agents:
 January 1, 1889.....
 January 1, 1890.....

LABOR AND WAGES.

CLASSIFICATION.	Average number employed. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
7. Labor:			
Above ground (not including office force):			
Foremen or overseers.....			
Mechanics.....			
Laborers (c).....			
Boys under 16.....			
Below ground (not including office force):			
Foremen or overseers.....			
Miners.....			
Laborers (c).....			
Boys under 16.....			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

8. Wages:

- Total amount of wages paid above during 1889..... \$.....
 Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them.. \$.....

9. Office force at mines or works: (d)

- Males.....No..... \$.....
 Females.....No..... \$.....
 Total..... \$.....

d Where two or more mines with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employés of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the mines with whose administration such persons are connected.

10. Number of days during the year when the mines or works were idle, and the cause.....

CAPITAL.

11. Total value of mine and improvements as at present developed..... \$.....
 Distributed as follows:
 In land..... \$.....
 In buildings and fixtures..... \$.....
 In tools, implements, live stock, machinery, and supplies on hand..... \$.....
 In cash (including all capital not reported in the foregoing items)..... \$.....

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

12. Power used in mining:

- Number and total horse power of steam boilers..No.....; horse power.....
 Number and size of cylinders of steam engines.....
 If other power, state kind.....
 Number of motors.....; horse power.....

13. Number of animals employed.....

14. Total value of supplies and materials of all kinds consumed during the year 1889..... \$.....

SPECIAL SCHEDULE NO. 4.—COPPER MINES—Continued.

15. Total of all other expenditures for the mines or works (including amounts paid for rent, taxes, insurance, interest, etc.)..... \$.....

SPECIAL SCHEDULE NO. 5.—LEAD MINES.

LOCATION.

1. Name of mine or works.....
 2. Location of mine:
 Mining district or region.....
 County.....
 State.....
 3. Name and post-office address of company, corporation, or individual operating the mine or works.....
 4. Name and post-office address of resident superintendent or agent.....

PRODUCT.

NOTE.—Use the long or short ton or other unit, according to your usual custom, but state definitely the number of pounds in the unit used. If any calculations are made, such as determining the total value of the product, it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.

5. Total amount of ore produced in the year ended December 31, 1889.....
 6. Total amount of refined lead produced in 1889.....
 7. Total stock of ore on hand, including that at mine or furnace, in transit, and unsold in hands of agents:
 January 1, 1889.....
 January 1, 1890.....
 Principal markets for the ore.....

LABOR AND WAGES.

CLASSIFICATION.	Average number employed. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
8. Labor:			
Above ground (not including office force):			
Foremen or overseers.....			
Mechanics.....			
Laborers (c).....			
Boys under 16.....			
Below ground (not including office force):			
Foremen or overseers.....			
Miners.....			
Laborers (c).....			
Boys under 16.....			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified in the schedule.

9. Wages:

- Total amount of wages paid above during 1889..... \$.....
 Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them.. \$.....

10. Office force at mines or works: (d)

- Males.....No..... \$.....
 Females.....No..... \$.....
 Total..... \$.....

d Where two or more mines with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employés of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the mines with whose administration such persons are connected.

11. Number of days during the year when the mines or works were idle, and the cause.....

CAPITAL.

12. Total value of mine and improvements as at present developed..... \$.....
 Distributed as follows:
 In land..... \$.....
 In buildings and fixtures..... \$.....
 In tools, implements, live stock, machinery, and supplies on hand..... \$.....
 In cash (including all capital not reported in the foregoing items)..... \$.....

SPECIAL SCHEDULE No. 5.—LEAD MINES—Continued.

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

13. Power used in mining:

Number and total horse power of steam boilers..No.; horse power.....
 Number and size of cylinders of steam engines
 If other power, state kind.....
 Number of motors.....; horse power.....

14. Number of animals employed.....

15. Total value of supplies and materials of all kinds consumed during the year 1889.....\$.....

16. Total of all other expenditures for the mines or works (including amounts paid for rent, taxes, insurance, interest, etc.).....\$.....

SPECIAL SCHEDULE No. 6.—ZINC MINES.

LOCATION.

1. Name of mine or works
2. Location of mine:
 Mining district or region
- County
- State.....
3. Name and post-office address of company, corporation, or individual operating the mine or works
4. Name and post-office address of resident superintendent or agent

PRODUCT.

NOTE.—Use the long or short ton or other unit, according to your usual custom, but state definitely the number of pounds in the unit used. If any calculations are made, such as determining the total value of the product, it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.

5. Total amount of ore produced in the year ended December 31, 1889
6. Total amount of refined spelter produced in 1889
7. Total stock of ore on hand, including that at mine, mill, or smelter, in transit and unsold in hands of agents:
 January 1, 1889.....
 January 1, 1890.....

LABOR AND WAGES.

CLASSIFICATION.	Average number employed. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
8. Labor:			
Above ground (not including office force):			
Foremen or overseers.....			
Mechanics.....			
Laborers (c).....			
Boys under 16			
Below ground (not including office force):			
Foremen or overseers.....			
Miners.....			
Laborers (c).....			
Boys under 16			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

9. Wages:

Total amount of wages paid above during 1889.....\$.....
 Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them.....\$.....

SPECIAL SCHEDULE No. 6.—ZINC MINES—Continued.

10. Office force at mines or works: (d)

Males.....No.....\$.....
 Females.....No.....\$.....
 Grand total of wages.....\$.....

d Where two or more mines with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employees of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the mines with whose administration such persons are connected.

11. Number of days during the year when the mines or works were idle, and the cause

CAPITAL.

12. Total value of mine and improvements as at present developed.....\$.....

Distributed as follows:

In land.....\$.....
 In buildings and fixtures.....\$.....
 In tools, implements, live stock, machinery, and supplies on hand.....\$.....
 In cash (not reported in the foregoing items).....\$.....

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

13. Power used in mining:

Number and total horse power of steam boilers..No.; horse power.....
 Number and size of cylinders of steam engines.....
 If other power, state kind.....
 Number of motors.....; horse power.....

14. Number of animals employed.....

15. Total value of supplies and materials of all kinds consumed during the year 1889.....\$.....

16. Total of all other expenditures for the mines or works (including amounts paid for rent, taxes, insurance, interest, etc.).....\$.....

SPECIAL SCHEDULE No. 9.—MANGANESE ORE MINES.

LOCATION.

1. Name or designation of mine
2. Location of mine:
 Mining district, region, or range
- County
- State.....
3. Name and post-office address of company, corporation, or individual operating the mine or works.....
4. Name and post-office address of resident superintendent or agent.....
5. Character of ore produced:
 Bog manganese, wad.....
 Braunite, brown oxide.....
 Pyrolusite, black oxide, peroxide.....
 Hausmannite.....

PRODUCT.

NOTE.—Use the long or short ton, according to your usual custom, but state definitely the number of pounds in the ton used. If any calculations are made, such as determining the total value of the product from the price per ton, it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.

6. Total amount of marketable manganese ore produced in the year ended December 31, 1889, including the amount smelted at the mine.....

7. Total stock of ore on hand, including that at mine or furnace, in transit, and unsold in hands of agents:
 January 1, 1889.....
 January 1, 1890.....

8. Total value, on cars or carts at the mine, of manganese ore produced in 1889.....\$.....

9. Principal markets, and proportion of product sent to each market to which your ore is supplied.....

SPECIAL SCHEDULE No. 9.—MANGANESE ORE MINES—Continued.

LABOR AND WAGES.

CLASSIFICATION.	Average number employed. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
10. Labor:			
Above ground (not including office force):			
Foremen or overseers.....			
Mechanics.....			
Laborers (c).....			
Boys under 16.....			
Below ground (not including office force):			
Foremen or overseers.....			
Miners.....			
Laborers (c).....			
Boys under 16.....			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

11. Wages:	
Total amount of wages paid above during 1889.....	\$.....
Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them.....	\$.....
12. Office force at mines or works: (d)	
Males.....	No. \$.....
Females.....	No. \$.....
Grand total of wages.....	\$.....

d Where two or more mines with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employees

SPECIAL SCHEDULE No. 9.—MANGANESE ORE MINES—Continued.

of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the mines with whose administration such persons are connected.

13. Number of days during the year when the mines or works were idle, and the cause.....

CAPITAL.

14. Total value of mine and improvements as at present developed.....	\$.....
Distributed as follows:	
In land.....	\$.....
In buildings and fixtures.....	\$.....
In tools, implements, live stock, machinery, and supplies on hand.....	\$.....
In cash (not reported in the foregoing items).....	\$.....

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

15. Power used in mining:	
Number and total horse power of steam boilers.....	No.; horse power.....
Number and size of cylinders of steam engines.....	
If other power, state kind.....	
Number of motors.....	; horse power.....
16. Number of animals employed.....	
17. Total value of supplies and materials of all kinds consumed during the year 1889.....	\$.....
18. Total of all other expenditures for the mines or works (including amounts paid for rent, taxes, insurance, interest, etc.).....	\$.....

SPECIAL SCHEDULE No. 11.—PRECIOUS STONES.

1. PRODUCTION OF ROUGH PRECIOUS STONES, GEMS, AND ORNAMENTAL STONES IN THE UNITED STATES IN 1889.

NAME OF FINDER.	Post-office address of finder.	Name and post-office address of present owner.	Names of stones found.	Number of stones found.	Total value of stones before cutting.	Value after cutting into gems.	Value after cutting into watch jewels.	Value after cutting into cabinet specimens, polished on one or more sides.

LABOR AND WAGES.

DESCRIPTION.	Diamonds.	Rubies, sapphires, and all stones not elsewhere specified.	Agate, moss-agate, jasper, etc.
2. In cutting and polishing:			
Amount of material cut.....			
Value of above material.....			
Weight of above material.....			
Number of men employed.....			
Average wages per day (a).....			
Number of boys employed.....			
Average wages per day (a).....			

a Wages must include value of board or rent furnished as part compensation.

3. Wages:	
Total amount of wages paid all classes during 1889.....	\$.....
4. Number of days during the year when the cutting outfit was idle, and the cause.....	

CAPITAL.

5. Total value of cutting outfit.....	\$.....
Distributed as follows:	
In buildings and fixtures.....	\$.....
In tools, implements, machinery, and supplies on hand.....	\$.....
In cash (not reported in the foregoing items).....	\$.....

6. Power used in cutting:	
Number and total horse power of steam boilers.....	No.; horse power.....
Number and size of cylinders of steam engines.....	
If other power, state kind.....	
Number of motors.....	; horse power.....
7. Total value of supplies and materials of all kinds consumed during the year 1889.....	\$.....
8. Total of all other expenditures for the establishment (including amounts paid for rent, taxes, insurance, interest, etc.).....	\$.....
NOTE.—Remarks concerning the methods of cutting employed, etc., will be gladly received, and should be noted on the blank pages.	
9. Names and addresses of other producers or cutters of precious stones, gems, or ornamental stones:	

NAMES.	Addresses.	Character of stones produced.

SPECIAL SCHEDULE No. 12.—COAL MINES.

LOCATION.

1. Name of mine.....	
2. Location of mine:	
Mining district or region.....	
County.....	
State.....	
Name and distance of nearest railroad station.....	

SPECIAL SCHEDULE No. 12.—COAL MINES—Continued.

2. Name and post-office address of company, corporation, or individual operating the mine or works.....
4. Name and post-office address of resident superintendent or agent.....
5. Character of coal produced:
(Whether, anthracite, semibituminous, bituminous, or lignite).....
- PRODUCT.
- NOTE.—Use the long or short ton or other unit, according to your usual custom, but state definitely the number of pounds in the unit used. If any calculations are made, such as determining the total value of the product from the price per ton or bushel, it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.
6. Total product of coal of all grades in the year ended December 31, 1889.....
7. Disposition of total product:
- Loaded at mines for shipment on railroad cars and boats.....
 - Sold to local trade at mines.....
 - Used by employes.....
 - Used for steam, ventilating, and heating purposes by operator at mines.....
 - Manufactured into coke.....
8. Maximum production for any month during 1889, with name of month.....
9. Total amount received for coal sold in 1889..... \$.....
10. Average price of coal on cars at the mine: (If price is made at a distance from the mine, the freight should be mentioned.)..... \$.....

LABOR AND WAGES.

CLASSIFICATION.	Average number employed. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
11. Labor:			
Above ground (not including office force):			
Foremen or overseers.....			
Mechanics.....			
Laborers (c).....			
Boys under 16.....			
Below ground (not including office force):			
Foremen or overseers.....			
Miners.....			
Laborers (c).....			
Boys under 16.....			

- a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.
- b Wages must include value of board or rent furnished as part compensation.
- c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

12. Wages:
- Total amount of wages paid above during 1889..... \$.....
- Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them..... \$.....
13. Office force at mines or works: (d)
- Males..... No..... \$.....
- Females..... No..... \$.....
- Grand total of wages..... \$.....

d Where two or more mines with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employees of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the mines with whose administration such persons are connected.

14. Number of days during the year when the mines or works were idle, and the cause.....

CAPITAL.

15. Total value of mine and improvements as at present developed..... \$.....
- Distributed as follows:
- In land..... acres.....; value, \$.....
- In buildings and fixtures..... \$.....
- In tools, implements, live stock, machinery, and supplies on hand..... \$.....
- In cash (not reported in the foregoing items)..... \$.....

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of

SPECIAL SCHEDULE No. 12.—COAL MINES—Continued.

property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

16. Power used in mining:
- Number and total horse power of steam boilers... No.....; horse power.....
- Number and size of cylinders of steam engines.....
- If other power, state kind.....
- Number of motors.....; horse power.....
- Number and kind of mining machines.....
17. Number of animals employed.....
18. Total value of supplies and materials of all kinds consumed during the year 1889..... \$.....
19. Total of all other expenditures for the mines or works (including amounts paid for rent, taxes, insurance, interest, etc.)..... \$.....

SPECIAL SCHEDULE No. 12a.—COAL DISTRIBUTION.

GENERAL INSTRUCTIONS.

Page 3 is intended only for reports from railroads; page 5 for canals and inland waterways, and page 7 for harbor and wharf masters.

Persons receiving this schedule will therefore fill out only the page designed for their report and leave the other two pages blank.

SPECIAL INSTRUCTIONS.

COAL TRANSPORTED BY RAILROADS.

For item 1 give in the proper columns the aggregate quantity of coal delivered to stations on your line for local consumption there, including engine supply and all coal for company use.

If your road traverses two or more states, give quantity separately for each state.

For item 2 give quantity delivered to each connecting line, with name of road and point of transfer.

For item 3 give name or location of port or wharves, and quantity delivered at each.

For item 4, although included in the aggregate of item 1, it is desired that the quantity delivered for consumption at each of the places named be given separately.

Give figures in tons, and note at foot of page the number of pounds in the ton as used by you.

COAL TRANSPORTED BY RAILROADS.

INQUIRIES.	MINED ON LINE OF ROAD.		RECEIVED FROM CONNECTING LINES.	
	Anthracite.	Bituminous.	Anthracite.	Bituminous.
1. Quantity delivered for consumption to all stations on your line in the state of—				
2. Quantity delivered to connecting lines:				
3. Quantity delivered to shipping wharves for subsequent water transportation:				
Total tonnage.....				
4. Quantity delivered for consumption at each of the following points:				

SPECIAL INSTRUCTIONS.

CANALS AND ISLAND WATERWAYS.

For item 1 give in the proper columns the aggregate quantity of coal delivered or forwarded by you for local consumption at destination, giving aggregate quantity for each state separately.

For item 2 give quantity delivered at ports or wharves for further transportation, naming delivery points and quantity to each.

Item 3. Although the coal covered by this item is included in the aggregate of item 1, it is desired that the quantity delivered for consumption at each of the places named be given separately.

Give figures in tons, and note at foot of page the number of pounds in the ton as used by you.

SPECIAL SCHEDULE No. 12a.—COAL DISTRIBUTION—Continued.

COAL TRANSPORTED BY CANALS AND INLAND WATERWAYS.

INQUIRIES.	RECEIVED DIRECT FROM MINES.		RECEIVED FROM OTHER TRANSPORTATION LINES.	
	Anthracite.	Bituminous.	Anthracite.	Bituminous.
1. Quantity delivered for consumption to points in the state of—				
2. Quantity delivered for further transportation by rail at—				
Total.....				
3. Quantity delivered for consumption at each of the following points:				

SPECIAL INSTRUCTIONS.

COAL SHIPPED FROM PORTS AND WHARVES.

For item 1 give in the proper columns the aggregate quantity of coal shipped or transferred at your port.

If shipped by vessel, give points of destination and aggregate quantity to each point.

If delivered direct to a railroad, give name of road and quantity so delivered.

For item 2 give aggregate of shipments to each foreign port.

Give figures in tons, and note at foot of page the number of pounds in the ton as used by you.

COAL SHIPPED BY VESSEL OR RAIL FROM PORTS AND WHARVES.

INQUIRIES.	SHIPPED BY WATER.		SHIPPED BY RAIL.	
	Anthracite.	Bituminous.	Anthracite.	Bituminous.
1. Quantity shipped to domestic points, as follows:				
2. Quantity shipped to foreign ports, as follows:				

SPECIAL SCHEDULE No. 13.—QUICKSILVER MINES AND REDUCTION WORKS.

LOCATION.

- Name of mine and works.....
- Location of mine and works:
Mining district or region.....
County.....
State.....
- Name and post-office address of company, corporation, or individual operating the mine and works.....
- Name and post-office address of resident superintendent or agent.....
- Number of furnaces in operation in December, 1889.....
- Number of furnaces not in operation in December, 1889.....

PRODUCT.

NOTE.—Use the short ton of 2,000 pounds. If any calculations are made, such as determining the total value of the supplies, etc., it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.

- Total number of tons of ore produced in the year ended December 31, 1889.....
- Total number of tons of ore roasted in the year ended December 31, 1889.....
- Total number of tons of quicksilver produced in 1889.....
- Total number of flasks of quicksilver produced in 1889.....
- Average percentage yield of quicksilver from ore roasted in 1889.....

SPECIAL SCHEDULE No. 13.—QUICKSILVER MINES AND REDUCTION WORKS—Continued.

LABOR AND WAGES.

CLASSIFICATION.	Average number employed daily. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
12. Labor:			
Above ground (not including office force):			
Foremen or overseers.....			
Mechanics.....			
Laborers (c).....			
Boys under 16.....			
Below ground (not including office force):			
Foremen or overseers.....			
Miners.....			
Laborers (c).....			
Boys under 16.....			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

- Wages:
Total amount of wages paid above during 1889..... \$.....
Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them..... \$.....

- Office force at mines or works: (d)
Males..... No. \$.....
Females..... No. \$.....
Total..... \$.....

d Where two or more mines with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employees of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the mines with whose administration such persons are connected.

- Number of days during the year when the mines or works were idle, and the cause.....

CAPITAL.

- Total value of mines and improvements as at present developed..... \$.....
Distributed as follows:
In mines and real estate..... \$.....
In furnaces, houses, and other surface improvements..... \$.....
In machinery, supplies on hand, tools, and live stock..... \$.....
In quicksilver unsold January 1, 1889. No. of flasks..... ;
value..... \$.....
In bills and accounts receivable..... \$.....
In any other assets..... \$.....

NOTE.—In stating the amount of capital there should be included the capital invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property. This statement, to be complete, should include as capital all accounts having time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost on January 1, 1890, and quicksilver unsold should include all at works or elsewhere at that date.

- Power used in mining:
Number and total horse power of steam boilers..... No. ; horse power.....
Number and size of cylinders of steam engines.....
If other power, state kind.....
Number of motors..... ; horse power.....
- Number of animals employed.....
- Total value of supplies and materials of all kinds consumed during the year 1889..... \$.....
- Total of all other expenditures for the mines or works (including amounts paid for rent, taxes, insurance, interest, etc.)..... \$.....

SPECIAL SCHEDULE No. 14.—CRUDE PETROLEUM.

NOTE.—The questions asked in this schedule relate only to the production of crude petroleum, its storage at the wells, and its distribution from the wells. It is not intended to include any statements regarding refineries, the transportation of petroleum from the wells by pipe lines, or the storage of petroleum by the pipe lines or at refineries. Special schedules will be furnished for these statements.

LOCATION.

1. Location of wells reported in this schedule:

Oil district, if known by any special name
 City, town, or township
 County; state

NOTE.—It is desired, if parties own wells in more than one city, town, or township, that separate returns be made for each city, town, etc. When this is not possible, please report the production of each county separately. Additional schedules will be furnished, if desired.

2. Name and post-office address of company, corporation, or individual operating the wells

PRODUCTION.

3. Product by months:

[Barrels of 42 gallons.]

MONTHS.	Crude, for illuminating.	Crude, for lubricating.	Fuel oil.	Total.
1889.				
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
Total				

4. Total value at wells of all oil produced, excluding pipage:

Illuminating \$.....
 Lubricating \$.....
 Fuel oil \$.....
 Total \$.....

5. Stock at well:

NOTE.—In this table give only stocks at wells, not including any stocks that may be held by you in pipe lines and represented by pipe-line certificates. If you have a pipe line and tanks away from wells for your exclusive use, make report of same on a schedule that will be furnished for that purpose. Please be careful to distinguish between good merchantable oil and sediment (B. S.).

[Barrels of 42 gallons.]

MONTHS.	TOTAL MERCHANTABLE CRUDE.			Total sediment (B. S.).	Total stock.
	Illuminating.	Lubricating.	Fuel oil.		
1888.					
December 31					
1889.					
January 31					
February 28					
March 31					
April 30					
May 31					
June 30					
July 31					
August 31					
September 30					
October 31					
November 30					
December 31					
Average					

SPECIAL SCHEDULE No. 14.—CRUDE PETROLEUM—Continued.

6. Value of stock on hand at wells December 31, 1889:

Illuminating \$.....
 Lubricating \$.....
 Fuel oil \$.....

Total \$.....

7. Distribution of product:

(Under this head please give a statement as to what has become of oil produced).

Stocks at wells December 31, 1888.
 Produced in 1889

Total
 Stock December 31, 1889.

Distribution in 1889:

Delivered to pipe lines
 Dump oil
 Run to waste
 Evaporated
 Burned by lightning, fire, etc., at wells, and not included in general average of pipe lines
 Remaining on hand December 31, 1889.

Total \$.....

LABOR AND WAGES.

8. Total number of persons employed and wages paid in 1889 \$.....

All labor, not including office force:

Number of foremen or overseers
 Total wages paid all workmen of this class in 1889 \$.....
 Number of mechanics
 Total wages paid all workmen of this class in 1889 \$.....
 Number of laborers
 Total wages paid all workmen of this class in 1889 \$.....
 Boys under 16 years
 Total wages paid all boys under 16 \$.....

Office force:

Males—Total number Total wages paid \$.....
 Females—Total number Total wages paid \$.....

NOTE.—Where two or more groups of wells with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employes of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the wells with whose administration such persons are connected.

9. Wages paid for labor:

In building rigs \$.....
 In drilling wells \$.....
 In operating and caring for wells \$.....
 In torpedoing wells \$.....
 In building or repairing tankage \$.....
 In building and repairing pipe lines \$.....
 In office \$.....

Total as above \$.....

10. Classified wages:

NOTE.—It is earnestly desired that the following table be filled out with as much detail as possible. In the first column give the classes of employes by the name by which they are usually known, as carpenter, driller, engineer, etc.; in the second, the average number of employes of each class, and in the others, wages, earnings, etc.

CLASSES OF EMPLOYEES.	Number of each.	Wages when men are paid by day.	Wages per foot, etc., when men are paid by the piece.	Earnings of piece-workers.	Days employed in year.
.....					
.....					
.....					

11. Was production stopped during the year? If so, for how long a period, and what was the cause?

12. Operating and caring for wells:

Total value of all materials used in pumping, operating, and caring for wells \$.....

CAPITAL.

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be

SPECIAL SCHEDULE No. 14.—CRUDE PETROLEUM—Continued.

complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890. If land is leased, estimate its value as oil territory as near as may be, and include amount in answer.

13. Total capital (real and personal) invested in lands, wells, leases, etc., and employed in the business \$.....
14. Number of acres of oil land:
- Owned
- Leased
- Total acreage.....
- Present value of land, both owned and leased \$.....
15. Value of rigs, wells, engines, boilers, etc \$.....
- Value of tanks \$.....
- Value of tank cars \$.....
- Value of pipe lines at wells owned by party making report \$.....
- Value of oil in stock at wells, December 31, 1889 \$.....
- Value of other property and improvements \$.....
- Total..... \$.....

16. Rigs:

Total number of rigs building but not completed:

December 31, 1888	July 31, 1889
January 31, 1889	August 31, 1889
February 28, 1889	September 30, 1889
March 31, 1889	October 31, 1889
April 30, 1889	November 30, 1889
May 31, 1889	December 31, 1889
June 30, 1889	

Total value of materials used in building rigs \$.....

Total number of rigs completed during—

January, 1889	July, 1889
February, 1889	August, 1889
March, 1889	September, 1889
April, 1889	October, 1889
May, 1889	November, 1889
June, 1889	December, 1889

Total cost of rigs built in 1889 \$.....

17. Wells:

Total number of wells drilling:

December 31, 1888	July 31, 1889
January 31, 1889	August 31, 1889
February 28, 1889	September 30, 1889
March 31, 1889	October 31, 1889
April 30, 1889	November 30, 1889
May 31, 1889	December 31, 1889
June 30, 1889	

Total value of materials used in drilling wells \$.....

18. Completed wells:

In the following table please give total number of wells completed during each month in 1889, how many were dry, how many producing, and the initial daily product of new wells.

MONTHS.	Total number of wells completed in each month.	Number of dry holes.	Number of wells producing.	Initial daily production of new wells.
1889.				
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
Total				

SPECIAL SCHEDULE No. 14.—CRUDE PETROLEUM—Continued.

19. Producing wells:

In the following table give total number of producing wells and number pumping or flowing, together with number of wells that were abandoned, that is, ceased producing during the year.

MONTHS.	Total number producing.	Number pumping.	Number flowing.	Total number abandoned.
1888.				
December 31				
1889.				
January 31				
February 28				
March 31				
April 30				
May 31				
June 30				
July 31				
August 31				
September 30				
October 31				
November 30				
December 31				
Total				

20. If wells were abandoned, what was the cause?

21. Were any wells that had ceased producing cleaned out and retubed during the year? If so, please give the number, and the result of the cleaning out.

22. Number of wells torpedoed during the year \$.....

Cost of torpedoing

23. Tankage:
Please give character and capacity of tankage at wells, giving size, material, and capacity of each.

NUMBER.	SIZE.		Material (as wood, iron, etc.).	Capacity. (Barrels of 42 gallons).
	Diameter.	Height.		
.....				
.....				
.....				

24. Tankage at wells:

Total value of materials used in building or repairing tanks in 1889. \$.....

25. Transportation at wells:

Total value of all materials, as pipe, couplings, etc., used in building or repairing pipe lines at wells in 1889. \$.....

Total value of all materials used in building or repairing tank cars in 1889. \$.....

26. Pipe lines at wells:

Total length of pipe lines at wells, not including that belonging to pipe-line companies.....feet.

Total value..... \$.....

Sizes of same, and length of each size

NOTE.—Remarks as to the sand or other strata from which the oil is produced, depth of the wells, diameter of holes drilled, cost of drilling per running foot, character of rigs used, character of petroleum produced, special uses for which it is adapted, etc., will be gladly received, and should be included on the blank pages of this schedule.

SPECIAL SCHEDULE No. 15.—NATURAL GAS.

LOCATION.

1. Location of wells reported in this schedule:

Natural gas district, if known by any special name.....

City, town, or township.....

County.....state.....

NOTE.—It is desired, if parties own wells in more than one city, town, or township, that separate returns be made for each city, town, etc. When this is not possible, please report for the wells of each county separately. Additional schedules will be furnished if desired.

2. What cities, towns, or villages are supplied by you, either in whole or in part, with natural gas?

3. Name and post-office address of company, corporation, or individual operating the wells.....

SPECIAL SCHEDULE No. 15.—NATURAL GAS—Continued.

PRODUCTION.

NOTE.—Please give as complete and exact statements as possible regarding production during the year 1889. It is conceded that this will be difficult to do, but it is hoped that as exact an answer as is possible will be given to the following questions:

4. Total production of wells during the year ending December 31, 1889, cubic feet.....
- Amount consumed in useful work..... cubic feet.....
- Went to waste..... cubic feet.....

The amount consumed in useful work was distributed as follows:

	NO. OF FIRES.	CUBIC FEET CONSUMED.
Domestic uses.....		
Iron rolling mills.....	NO. OF WORKS SUPPLIED.	
Steel works.....		
Glass works.....		
Other establishments.....		

5. Value of gas produced and used:

NOTE.—In answering this question the best measure of the value of gas produced is the actual amount charged consumers. Where gas is given away, as is the case in many localities, estimate the value of the gas used by the parties receiving it gratis. The best way to reach this value, when but little gas is sold, is to estimate how much coal or wood would be used to do the work; that is, to supply the same number of fires, to make the same amount of iron or glass, to fire the same number of boilers, etc., and regard the value of this coal as the value of the gas.

Total actual selling price or value, as estimated above, of all gas produced and used for the year ending December 31, 1889..... \$.....

How much coal would have been required to do the same work..... tons.....

What would have been the value of this coal..... \$.....

LABOR AND WAGES.

6. Total number of persons employed and total wages paid in 1889:

Number (a).....; total wages (b)..... \$.....

Details of above:

Number of foremen or overseers.....

Total wages paid to all workmen of this class in 1889..... \$.....

Number of mechanics.....

Total wages paid to all workmen of this class in 1889..... \$.....

Number of laborers (c).....

Total wages paid to all workmen of this class in 1889..... \$.....

Number of boys under 16 years.....

Total wages paid to all boys in 1889..... \$.....

Office force: (d)

Males.....total number.....; total wages..... \$.....

Females.....total number.....; total wages..... \$.....

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified in the schedule.

d Where two or more groups of wells with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employees of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the wells with whose administration such persons are connected.

RATES OF WAGES.

7. Class of employees:

It is earnestly desired that the following table be filled out with as much detail as possible. In the first column give the classes of employees by the name by which they are usually known, as carpenter, driller, engineer, etc. Include not only men at wells, but pipe-line and station men, valve men, fitters, etc.

CLASSES OF EMPLOYEES.	Number of each class.	Wages where men are paid by the day.	Wages per foot, etc., where men are paid by the piece.	Earnings of piece-workers.	Days employed in year.
.....					
.....					
.....					
.....					

SPECIAL SCHEDULE No. 15.—NATURAL GAS—Continued.

8. Was drilling stopped during the year? If so, for how long a period, and what was the cause?.....
9. Was production stopped during the year? If so, for how long a period, and what was the cause?.....

CAPITAL.

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of lands, leases, gas rights, wells, pipe lines, and all real and other property, should be estimated at what they are worth or would cost in 1890. If land is leased, estimate its value as gas territory, as near as may be, and include this value in answer. These questions are intended to get at the value of property, which may be more or less than capital.

10. Total capital invested in lands, wells, pipe lines, etc., and used in business..... \$.....
- Number of acres of natural gas land:
- Owned.....
- Leased.....
- Total acreage.....
- Present value of land, both owned and leased..... \$.....
- Value of rigs, wells, engines, boilers, etc..... \$.....
- Value of pipe lines, including rights of way..... \$.....
- Value of all other property and improvements..... \$.....
- Total..... \$.....

11. Wells:

Total number of wells drilling:

December 31, 1888.....	July 31, 1889.....
January 31, 1889.....	August 31, 1889.....
February 28, 1889.....	September 30, 1889.....
March 31, 1889.....	October 31, 1889.....
April 30, 1889.....	November 30, 1889.....
May 31, 1889.....	December 31, 1889.....
June 30, 1889.....	

COMPLETED WELLS.

In the following table please give total number of wells completed during each month in 1889, how many were dry, how many producing, the initial pressure, and estimated daily production of new wells.

MONTHS.	Total number of wells completed in each month.	Number of dry holes.	Number of wells producing.	Initial pressure of new wells.	Estimated daily production of new wells.
1889.				Pounds.	Cubic feet.
January.....					
February.....					
March.....					
April.....					
May.....					
June.....					
July.....					
August.....					
September.....					
October.....					
November.....					
December.....					
Total.....					

State if pressure was closed or flowing.....

Total cost of drilling wells in 1889, including cost of rigs, drive-pipe, casing, and tubing..... \$.....

Of this total cost state—

The amount of wages paid labor..... \$.....

Cost of material..... \$.....

SPECIAL SCHEDULE No. 15.—NATURAL GAS—Continued.

PRODUCING WELLS.

In the following table give total number of producing wells, together with number of wells that were abandoned, that is, ceased producing during the year:

MONTHS.	Total number producing.	Total number abandoned.
1888.		
December 31		
1889.		
January 31		
February 28		
March 31		
April 30		
May 31		
June 30		
July 31		
August 31		
September 30		
October 31		
November 30		
December 31		
	Average	Total

If wells were abandoned, what was the cause?
 Were any wells that had ceased producing cleaned out and retubed during the year? If so, please give number and the result of cleaning out
 Number of wells torpedoed during year..... Cost of torpedoing \$.....

12. Pressure:

Please give such facts relative to well pressure as may be of interest, especially with reference to the flowing and closed pressure of the wells when first struck, and statements as to changes in this pressure during the year.

13. Charges to consumers:

Please give below rates charged to consumers for gas. If you have printed tables of rates, please inclose copies, stating whether these are adhered to or discounted. Make the answer as full and complete as possible.

14. Pipe lines:

In the following table give number of feet of each size of pipe laid prior to January 1, 1889, and up to and including December 31, 1889:

SIZE OF PIPE. (Inches.)	Total number of feet laid prior to January 1, 1889.	Total number of feet laid up to and including December 31, 1889.	Size of pipe. (Inches.)	Total number of feet laid prior to January 1, 1889.	Total number of feet laid up to and including December 31, 1889.

15. Materials used:

Total value of materials used in building rigs..... \$.....
 Total value of materials used in drilling wells..... \$.....
 Total value of all materials used in operating, shutting in, and earing for wells..... \$.....
 Total value of all materials, as pipe, couplings, etc., used in building or repairing pipe lines in 1889..... \$.....
 Total value of all materials used in fitting..... \$.....
 Number of torpedoes used.....; value..... \$.....
 Total value of all other materials..... \$.....

16. Exhaustion of district:

Please give such facts as you may have relative to the giving out of wells, reduction of pressure, etc., that will bear upon the question of the exhaustion of gas in your district.

NOTE.—Remarks as to the sand or other strata from which the gas is produced, depth of wells, diameter of holes drilled, cost of drilling per running foot, character of rigs used, character of gas produced, character of petroleum accompanying the gas, special uses for which the gas is adapted, etc., will be gladly received, and should be included on the blank pages of this schedule.

PETROLEUM PRODUCED.

17. Product by months:

(If you produced any petroleum from gas wells during the year please fill out the table below. A separate schedule will be sent if you have petroleum wells as well as gas wells.)

SPECIAL SCHEDULE No. 15.—NATURAL GAS—Continued.

[Barrels of 42 gallons.]

MONTHS.	Crude for illuminating.	Crude for lubricating.	Fuel oil.	Total.
1889.				
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				
Total				

18. Total value at wells of all oil produced, excluding pipage:

Illuminating..... \$.....
 Lubricating..... \$.....
 Fuel oil..... \$.....

Total..... \$.....

19. Stocks at well:

NOTE.—In this table give only stocks at wells, not including any stocks that may be held by you in pipe lines and represented by certificates. If you have a pipe line and tanks away from wells for your exclusive use, make report of same on schedule that will be furnished for that purpose. Please be careful to distinguish between good merchantable oil and sediment (B. S.).

[Barrels of 42 gallons.]

MONTHS.	Total merchantable crude. (Illuminating.)	Total merchantable crude. (Lubricating.)	Total merchantable crude. (Fuel oil.)	Total sediment. (B. S.)	Total stock.
1888.					
December 31					
1889.					
January 31					
February 28					
March 31					
April 30					
May 31					
June 30					
July 31					
August 31					
September 30					
October 31					
November 30					
December 31					
Average					

20. Value of stock on hand at wells December 31, 1889:

Illuminating..... \$.....
 Lubricating..... \$.....
 Fuel oil..... \$.....

Total..... \$.....

21. Distribution of product:

(Under this head please give a statement as to what has become of oil produced.)

Stock at wells December 31, 1888.....
 Produced in 1889.....

Total.....

Distribution:

Delivered to pipe lines.....
 Dump oil.....
 Run to waste.....
 Evaporated.....
 Burned by lightning, fire, etc., at wells, and not included in general average of pipe lines.....
 Remaining on hand December 31, 1889.....

Total.....

SPECIAL SCHEDULE No. 15.—NATURAL GAS—Continued.

TANKAGE.

22. Please give character and capacity of tankage at wells, giving size, material, and capacity of each.

NUMBER.	SIZE.		Material (as wood, iron, etc.).	Capacity. (Barrels of 42 gallons.)
	Diameter.	Height.		
.....

Total value of tankage \$.....
 How many tank cars are owned by you and used in the freighting of
 crude petroleum?
 Value of same. \$.....

SPECIAL SCHEDULE No. 16.—STONE QUARRIES.

LOCATION.

1. Name of quarry
 2. Location of quarry:
 - District or region
 - County
 - State
 3. Name and post-office address of company, corporation, or individual operating the quarry
 4. Name and post-office address of resident superintendent or agent
 5. Character of stone produced:
 - Popular name (a)
 - Scientific name
 - Purposes for which the product is used
- a Give, as the popular name, that under which the stone is sold.

PRODUCT.

NOTE.—Use the cubic foot, cubic yard, perch, long or short ton, or whatever unit you customarily employ, but state distinctly which you use. If any calculations are made, such as determining the total value of the product from the prices received, it is requested that such calculations be made on the blank pages of this schedule, which may also be used for remarks and explanations of answers to the questions.

6. Total product of stone of all grades during the year ended December 31, 1889:
- Amounts applied to each of the different uses:

7. Total value of the above product: \$.....

NOTE.—This is determined by the selling price at the quarry, of whatever products the operator disposes of, whether rough or manufactured.

LABOR AND WAGES.

CLASSIFICATION.	Average number em- ployed. (a)	Average wages per day. (b)	Average num- ber of days' work made by each class dur- ing the year.
8. Labor (not including office force):			
Foremen or overseers
Quarrymen
Mechanics
Laborers (c)
Boys under 16

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

9. Wages:
- Total amount of wages paid above during 1889 \$.....
 - Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them \$.....

10. Office force at quarries or works: (d)
- Males No. \$.....
 - Females No. \$.....
 - Grand total of wages \$.....

SPECIAL SCHEDULE No. 16.—STONE QUARRIES—Continued.

d Where two or more quarries with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employes of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the quarries with whose administration such persons are connected.

11. Number of days during the year when the quarries or works were idle, and the cause:

CAPITAL.

12. Total value of quarries and improvements as at present developed \$.....
 Distributed as follows:
- In land \$.....
 - In buildings and fixtures \$.....
 - In tools, implements, live stock, machinery, and supplies on hand \$.....
 - In cash (not reported in the foregoing items) \$.....

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

13. Power used:
- Number and total horse power of steam boilers. No.; horse power.....
 - Number and size of cylinders of steam engines
 - If other power, state kind
 - Number of motors; horse power.....
14. Number of animals employed
15. Total value of supplies and materials of all kinds consumed during the year 1889 \$.....
16. Total of all other expenditures for the quarries (including amounts paid for rent, taxes, insurance, interest, etc.) \$.....

NOTE.—Remarks showing the uses for which your product has proved especially valuable, tests of strength, analyses, etc., will be gladly received and should be made upon the blank pages of this schedule.

SPECIAL SCHEDULE No. 17.—MINERAL WATERS.

LOCATION.

1. Name of springs
- Former name, if the springs have ever been known by any other name
2. Location of springs
- County
- State
3. Name and post-office address of company, corporation, or individual operating the springs
4. Name and post-office address of resident superintendent or agent
5. Total number of individual springs
6. Is the water on sale in the market?
7. Number of springs from which water is taken for sale
8. Total capacity of springs used commercially
9. Are the springs used as a resort?
10. Character of springs
11. Analysis
12. Date of analysis
13. Name of analyst
14. How is the water shipped? (Bottled or barreled)

PRODUCT.

15. Total product for the year ended December 31, 1889: (Estimate if no account is kept.)
- Number of gallons sold
 - Number of barrels sold

NOTE.—Give the above amount in gallons, if possible; if barrels are used, state their capacity and number. If the water is evaporated, and only the mass or evaporated material is sold, state its amount and fill in the number of gallons evaporated.

16. Average price per gallon at the springs \$.....
17. Total value of the product sold, determined by the selling price at the springs, or wherever the water is disposed of \$.....

SPECIAL SCHEDULE No. 17.—MINERAL WATERS—Continued.

LABOR AND WAGES.

CLASSIFICATION.	Average number employed. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
18. Labor (not including office force):			
Foremen or overseers.....			
Mechanics.....			
Laborers (c).....			
Boys under 16.....			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified in the schedule.

19. Wages:

Total amount of wages paid above during 1889..... \$.....

Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them..... \$.....

20. Office force at springs: (d)

Males..... No..... \$.....

Females..... No..... \$.....

Grand total of wages..... \$.....

d Where two or more springs with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employes of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the springs with whose administration such persons are connected.

21. Number of days during the year when no work was done at springs, and the cause.....

CAPITAL.

22. Total capital (real and personal) invested in lands, leases, improvements, etc., and employed in business..... \$.....

Distributed as follows:

In land..... \$.....

In buildings and fixtures..... \$.....

In tools, implements, live stock, machinery, and supplies on hand..... \$.....

In cash (including all capital not reported in the foregoing items)..... \$.....

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, water rights, rights of way, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

23. Power used:

Number and total horse power of steam boilers...No....; horse power.....

Number and size of cylinders of steam engines.....

If other power, state kind.....

Number of motors.....; horse power.....

24. Number of animals employed.....

25. Total value of supplies and materials of all kinds consumed during the year 1889..... \$.....

26. Total of all other expenditures for the springs (including amounts paid for rent, taxes, insurance, interest, etc.)..... \$.....

SPECIAL SCHEDULE No. 19.—LEAD SMELTERS AND REFINERS.

LOCATION.

1. Name of works.....

2. Location of works:

Town.....

County.....

State.....

SPECIAL SCHEDULE No. 19.—LEAD SMELTERS AND REFINERS—Cont'd.

3. Name and post-office address of company, corporation, or individual operating the works.....

4. Name and post-office address of resident superintendent or agent.....

PRODUCT.

NOTE.—If any calculations are made, such as determining the total value of the product, it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.

5. Total product of base bullion in the year ended December 31, 1889 (net tons of 2,000 pounds).....

6. Total stock of base bullion on hand or in transit:

January 1, 1889 (net tons of 2,000 pounds).....

January 1, 1890 (net tons of 2,000 pounds).....

7. Quantity of ore treated.....

8. Total value of ore treated..... \$.....

LABOR AND WAGES.

CLASSIFICATION.	Average number employed. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
9. Labor (not including office force):			
Foremen or overseers.....			
Mechanics.....			
Laborers (c).....			
Boys under 16.....			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

10. Wages:

Total amount of wages paid above during 1889..... \$.....

Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them.. \$.....

11. Office force at works: (d)

Males..... No..... \$.....

Females..... No..... \$.....

Total..... \$.....

d Where two or more works with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employes of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the works with whose administration such persons are connected.

12. Number of days during the year when the works were idle, and the cause....

CAPITAL.

13. Total value of works and improvements as at present developed..... \$.....

Distributed as follows:

In land..... \$.....

In buildings and fixtures..... \$.....

In tools, implements, live stock, machinery, and supplies on hand..... \$.....

In cash (including all capital not reported in the foregoing items). \$.....

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

14. Power used:

Number and total horse power of steam boilers...No....; horse power.....

Number and size of cylinders of steam engines.....

If other power, state kind.....

Number of motors.....; horse power.....

15. Number of animals employed.....

16. Total value of supplies and materials consumed during the year 1889, exclusive of value of ore..... \$.....

17. Total of all other expenditures for the works (including amounts paid for rent, taxes, insurance, interest, etc.)..... \$.....

SPECIAL SCHEDULE No. 20.—LEAD REFINERS.

LOCATION.

1. Name of works
2. Location of works:
 - Town
 - County
 - State
3. Name and post-office address of company, corporation, or individual operating the works
4. Name and post-office address of resident superintendent or agent

PRODUCT.

NOTE.—If any calculations are made, such as determining the total value of the product, it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.

5. Total product of refined lead in the year ended December 31, 1889, (net tons of 2,000 pounds)
6. Total stock of refined lead on hand, in transit, and unsold in hands of agents:
 - January 1, 1889 (net tons of 2,000 pounds)
 - January 1, 1890 (net tons of 2,000 pounds)
7. Copper contents of matte or refined copper produced (pounds fine)

LABOR AND WAGES.

CLASSIFICATION.	Average number employed. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
8. Labor (not including office force):			
Foremen or overseers			
Mechanics			
Laborers (c)			
Boys under 16			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

9. Wages:

- Total amount of wages paid above during 1889
- Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them

10. Office force at works: (d)

- Males
- Females
- Grand total of wages

d Where two or more works with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employes of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the works with whose administration such persons are connected.

11. Number of days during the year when the works were idle, and the cause....

CAPITAL.

12. Total value of works and improvements as at present developed
- Distributed as follows:
 - In land
 - In buildings and fixtures
 - In tools, implements, live stock, machinery, and supplies on hand
 - In cash (not reported in the foregoing items)

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

13. Power used:

- Number of total horse power of steam boilers...No.; horse power.....
- Number and size of cylinders of steam engines
- If other power, state kind
- Number of motors

SPECIAL SCHEDULE No. 20.—LEAD REFINERS—Continued.

14. Number of animals employed
15. Total value of supplies and materials of all kinds consumed during the year 1889, exclusive of matte, base bullion, or other source from which lead was refined
16. Total of all other expenditures for the works (including amounts paid for rent, taxes, insurance, interest, etc.)

SPECIAL SCHEDULE No. 21.—ZINC REDUCTION WORKS.

LOCATION.

1. Name of works
2. Location of works:
 - Town
 - County
 - State
3. Name and post-office address of company, corporation, or individual operating the works
4. Name and post-office address of resident superintendent or agent

PRODUCT.

NOTE.—If any calculations are made, such as determining the total value of the product, it is requested that such calculations be made on the blank pages of this schedule. These blank pages may also be used for any remarks explanatory of the answers given.

5. Total product of spelter or zinc in the year ended December 31, 1889 (net tons of 2,000 pounds)
6. Total stock of spelter or zinc on hand, in transit, and unsold in hands of agents:
 - January 1, 1889 (net tons of 2,000 pounds)
 - January 1, 1890 (net tons of 2,000 pounds)
7. Total quantity of ore treated
8. Total value of ore treated

LABOR AND WAGES.

CLASSIFICATION.	Average number employed. (a)	Average wages per day. (b)	Average number of days' work made by each class during the year.
9. Labor (not including office force):			
Foreman or overseers			
Mechanics			
Laborers (c)			
Boys under 16			

a In giving the number of men employed include those employed by contractors and subcontractors, as well as by the company itself.

b Wages must include value of board or rent furnished as part compensation.

c Laborers include watchmen, teamsters, and all workmen not otherwise classified.

10. Wages:

- Total amount of wages paid above during 1889
- Total amount paid to contractors for contract work done in 1889, not included in the above item, deducting supplies charged to them

11. Office force at works: (d)

- Males
- Females
- Grand total of wages

d Where two or more works with distinct organizations, and reported on separate census schedules, are directed and paid from one central office, the employes of such central office are not to be included in the table above. Please state on the blank page opposite the total number of males and females and their total yearly earnings, together with the names of the works with whose administration such persons are connected.

12. Number of days during the year when the works were idle, and the cause....

CAPITAL.

13. Total value of works as at present developed
- Distributed as follows:
 - In land
 - In buildings and fixtures
 - In tools, implements, live stock, machinery, and supplies on hand
 - In cash (not reported in the foregoing items)

NOTE.—In stating the amount of capital there should be included not only the amount of capital actually invested in the business, as in lands, leases, mineral rights, rights of way, private railroads, buildings, tools, and all other forms of property, but also that used in carrying on the business. This statement, to be

SPECIAL SCHEDULE No. 21.—ZINC REDUCTION WORKS—Continued.

complete, should include as capital all money borrowed, as well as accounts having a long time to run. The idea is to get returned as capital all money invested and used in the business, whether owned by the party making the return or borrowed. The value of land, fixtures, etc., should be estimated at what they are worth or would cost in 1890.

14. Power used:

Number and total horse power of steam boilers ..No....; horse power.....
 Number and size of cylinders of steam engines.....

SPECIAL SCHEDULE No. 21.—ZINC REDUCTION WORKS—Continued.

14. Power used—continued.

If other power, state kind.....

Number of motors; horse power.....

15. Number of animals employed

16. Total value of supplies and materials of all kinds consumed during the year 1889, exclusive of value of ore \$.....

17. Total of all other expenditures for the works (including amounts paid for rent, taxes, insurance, interest, etc.)..... \$.....

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